

WHAT IS CLAIMED IS:

1. A thermosensitive flow rate detecting element comprising:
  - a flat base material;
  - a cavity formed so as to pass through said base material from a rear surface to a front surface;
  - an electrically-insulating film formed so as to be positioned in a common plane with said front surface of said base material and to cover an aperture of said cavity on a front surface side of said base material; and
  - a heating resistor portion composed of a thermosensitive resistor film formed from a rear surface side of said base material on a portion of said electrically-insulating film formed at a position of said aperture of said cavity.
2. The thermosensitive flow rate detecting element according to Claim 1, further comprising a protective film formed so as to cover said front surface of said base material and an exposed surface of said electrically-insulating film exposed through said aperture of said cavity on said front surface side of said base material.
3. The thermosensitive flow rate detecting element according to Claim 1, further comprising a leader pattern constituted by a portion of said thermosensitive resistor film constituting said heating resistor portion extending outward from said heating resistor portion along a wall surface of said cavity onto said rear surface of said base material.
4. A thermosensitive flow rate detecting element comprising:
  - a flat base material having an electrically-insulating film formed over an entire surface of a front surface;
  - a cavity formed by removing a portion of said base material from a

rear surface side of said base material so as to extend to said electrically-insulating film; and

a heating resistor portion composed of a thermosensitive resistor film formed on an exposed surface of said electrically-insulating film exposed inside said cavity.

5. The thermosensitive flow rate detecting element according to Claim 4, further comprising a leader pattern constituted by a portion of said thermosensitive resistor film constituting said heating resistor portion extending outward from said heating resistor portion along a wall surface of said cavity onto said rear surface of said base material.

6. A method for manufacturing a thermosensitive flow rate detecting element comprising steps of:

forming a protective film on a front surface of a flat base material;

forming a cavity by removing a portion of said base material from a rear surface side of said base material so as to extend to said protective film;

forming an electrically-insulating film on a rear surface of said base material, a wall surface of said cavity, and an exposed surface of said protective film exposed inside said cavity; and

forming a heating resistor portion composed of a thermosensitive resistor film on a portion of said electrically-insulating film formed on said exposed surface of said protective film.

7. The method for manufacturing a thermosensitive flow rate detecting element according to Claim 6, further comprising a step of removing said protective film after said step of forming said electrically-insulating film.

8. The method for manufacturing a thermosensitive flow rate detecting element according to Claim 6, wherein a leader pattern extending outward from said heating resistor portion along a wall surface of said cavity onto a rear surface of said base material is formed simultaneously with said heating resistor portion by patterning said thermosensitive resistor film in said step of forming said heating resistor portion.